

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 3

REMARKS

In the Office Action, 1-15, 17, and 19-26 were rejected and claims 3-5, 16, and 18 were objected to as being dependent upon a rejected base claim but allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. The Applicant would like to thank the Examiner for indicating the allowable subject matter of claims 3-5, 16, and 18. By the present response, claims 1 and 7 have been amended for formal reasons in light of the Examiner's comments. Reconsideration of the rejections and allowance of the pending claims are respectfully requested.

Claim Objections

In the Office Action, claim 7 was objected to because claim 7 depends from claim 6, and it appeared to the Examiner that claims 6 and 7 claim different embodiments. Claim 7 has been amended to correct this typographical error.

Rejection Under 35 U.S.C. § 112

Claims 1-12 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner stated that:

Claim 1 recites the limitation "the rotatable shaft" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the second opening" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 has been amended in light of the Examiner's comments. Claim 2 has not been amended because "the second opening" in line 4 does have antecedent basis in the

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 4

claim. Specifically, the term "a second opening" is located in lines 3-4 of claim 2.
Withdrawal of the rejection is respectfully requested.

Rejection Under 35 U.S.C. § 102

In the Office Action, claims 1, 2, 6, 7, 11-15, 17, 22-24 and 26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nisley, U.S. Patent No. 5,833,372. Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985).

Applicants respectfully traverse the rejection. Claims 1, 2, 6, 7, 11-15, 17, 22-24, and 26 are not anticipated because the Nisley reference does not disclose all of the recited features of the claims.

Claims 1, 2, 6, 7, 11, 12, 22-24, and 26

In the Office Action, the Examiner stated that:

Re claims 1, 22-24 and 26, Nisley discloses a bearing assembly comprising a bearing insert (12), a bearing housing (24) adapted to house the bearing insert (column 4, lines 7-13), a cover (32) removably securable to the bearing housing and a rotatable finger (76) secured to the cover, the finger having a first opening therethrough, the first opening being adapted to receive a rotatable shaft (14) and to enable the rotatable finger to form a compression seal against the rotatable shaft.

Some of the recited features of independent claim 1 that are not disclosed by the Nisley reference are: "a rotatable flinger secured to the cover, the rotatable flinger having a first opening therethrough, the first opening being adapted to receive a rotatable shaft and to enable the rotatable flinger to form a compression seal against the rotatable shaft." The Nisley reference discloses a seal housing 28 and a shield 32 secured to seal housing 28 to

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 5

protect the components of the seal. *See* Nisley, col. 4, lines 3-5. The Nisley reference also discloses a seal ring 76 having an inner surface 78 sized to fit tightly around shaft 14 when installed. *See* Nisley, col. 5, lines 5-8. Seal ring 76 also is adapted to interface with seal housing 28 to define a series of sealing structures. *See* Nisley, col. 5, lines 3-5. However, seal ring 76 is not a rotatable flinger, nor is seal ring 76 secured to shield 32. As described in the Application, a “flinger” rotates with the shaft 12 and uses centrifugal force to throw clear of the cover 24 and shaft 12 any liquids or particulates that come into contact with the flinger 26.” Application, page 5, line 26. In addition, the Application states that: “Fluids and particulates, such as water, cleaning chemicals, and food debris, that come into contact with the flinger 26 as it is rotating are thrown clear of the bearing assembly 10.” Application, page 6, line 8. Thus, the term “flinger” has a special meaning as used in the claim, given the definitions and functionality set forth in this application.

The seal ring 76 of the Nisley reference is not a flinger. The seal ring 76 forms a seal with the seal housing 28. However, the seal ring 76 does not use centrifugal force to throw clear of the shield 32 and shaft 14 or bearing 34 any liquids or particulates that come into contact with the seal ring 76. In fact, the shield 32 *prevents* any fluids or particulates from being thrown clear of the shield 32 and shaft 14 by the seal ring 76. Any fluids or particulates that may be thrown against the interior of the shield 32 would be directed back towards the shaft 14 and bearing 34. Therefore, the seal ring 76 is not “a rotatable flinger secured to the cover, the rotatable flinger having a first opening therethrough, the first opening being adapted to receive a rotatable shaft and to enable the rotatable flinger to form a compression seal against the rotatable shaft.” Thus, the Nisley reference does not disclose all of the recited features of independent claim 1, or anticipate claim 1. Claims 2, 6, 7, 11, and 12 depend from independent claim 1 and, thus, also are not anticipated by the Nisley reference.

In addition, some of the recited features of independent claim 22 that are not disclosed by the Nisley reference are “engaging a rotatable shaft with a flinger operable to

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 6

rotate with the rotatable shaft and form a compression seal therewith” and “rotatably securing the flinger to a removable cover.” As discussed above, seal ring 76 of the Nisley reference is not a “flinger.” In addition, the seal ring 76 is not secured to the shield 32. Thus, the Nisley reference does not disclose all of the recited features of, or anticipate, independent claim 22. Claims 23, 24, and 26 depend from independent claim 22 and, thus, also are not anticipated by the Nisley reference.

Claims 13-15, and 17

In addition, the Nisley reference does not disclose all of the recited features of independent claim 13. Some of the recited features of claim 13 that are not disclosed by the Nisley reference are:

a rotatable member securable to the cover and adapted to receive the rotatable shaft therethrough, the rotatable member being configured to form a seal against the rotatable shaft and to rotate therewith to fling liquids or solids that come into contact with the rotatable member away from the bearing assembly.

In the Office Action, the Examiner stated that:

Re claims 13 and 14, Nisley discloses a sealing assembly for forming a seal between a bearing assembly and a rotatable shaft (14) comprising a cover (32) removably securable to a bearing housing (24) and a rotatable member (78) securable to the cover and adapted to receive the rotatable shaft therethrough, the rotatable member being configured to form a seal against the rotatable shaft and to rotate therewith to fling liquids or solids (sic) that come into contact with the rotatable member away from the bearing assembly.

The Nisley reference discloses a seal ring 76 having an inner surface 78 sized to fit tightly around shaft 14 when installed. *See* Nisley, col. 5, lines 5-8. However, the seal

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 7

ring 76 is not adapted to fling liquids or solids that come into contact with the seal ring 76 (or inner surface 78) away from the bearing assembly 12. As discussed above, shield 76 actually *prevents* fluids and particulates within the interior from being thrown clear of the bearing 34 and shaft 14 and directs them toward the bearing 34 and shaft 14. Thus, the Nisley reference does not disclose all of the recited features of independent claim 13 or anticipate claim 13. Claims 14, 15, and 17 depend from independent claim 13 and also are not anticipated by the Nisley reference.

For all of these reasons, claims 1, 2, 6, 7, 11-15, 17, 22-24 and 26 are not anticipated by the Nisley reference. Withdrawal of the rejection and allowance of the claims are respectfully requested.

First Rejection Under 35 U.S.C. § 103

Claims 8, 9, 19-21, and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nisley as applied to claims 1, 19 and 22, in view of Motsch, U.S. Patent No. 4,368,933. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

Applicants respectfully traverse the rejection. Claims 8, 9, 19-21, and 25 are patentable because the cited references do not disclose all of the recited features of the claims. In addition, claims 8 and 9 depend from independent claim 1, claims 19-21 depend from independent claim 13, and claim 25 depends from independent claim 22. For the reasons provided above, the Nisley reference does not disclose all of the recited features of independent claims 1, 13, and 22. The Mottsch reference does not obviate the

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 8

deficiencies of the Nisley reference in failing to disclose all of the recited features of independent claims 1, 13, and 22. Therefore, claims 8, 9, 19-21, and 25 are patentable by virtue of their dependence from independent claims 1, 13, and 22, as well as by virtue of their own recited subject matter. Withdrawal of the rejection and allowance of the claims are respectfully requested.

Second Rejection Under 35 U.S.C. § 103

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nisley as applied to claims 1, in view of Tooley, U.S. Patent No. 4,348,067. Applicant respectfully traverses the rejection. Claim 10 is patentable because the cited references do not disclose all of the recited features of the claim. For the reasons provided above, the Nisley reference does not disclose all of the recited features of independent claim 1. The Tooley reference does not obviate the deficiencies of the Nisley reference in failing to disclose all of the recited features of independent claim 1. Therefore, claim 10 is patentable by virtue of its dependence from independent claims 1, as well as by virtue of its own recited subject matter. Withdrawal of the rejection and allowance of claim 10 are respectfully requested.

Allowable Subject Matter

Claims 16 and 18 were objected to as being dependent upon a rejected base claim but allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. In addition, claims 3-5 were allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. The Applicant once again would like to thank the Examiner for indicating the allowable subject matter of claims 3-5, 16, and 18.

Claims 3-5 depend from independent claim 1 and claims 16 and 18 depend from independent claim 13. For the reasons provided above, claims 1 and 13 are patentable

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 9

over the cited references. Therefore, claims 3-5, 16, and 18 already are patentable over the cited references.

Attachment


Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Conclusion

In view of the above remarks and amendments set forth above, the Applicant respectfully requests allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: March 20, 2003


Ralph A. Graham
Reg. No. 47,607
Fletcher, Yoder & Van Someren
P.O. Box 692289
Houston, TX 77269-2289
(281) 970-4545

CORRESPONDENCE ADDRESS
ALLEN-BRADLEY COMPANY, LLC
Patent Department/704P Floor 8 T-29
1201 South Second Street
Milwaukee, Wisconsin 53204
Attention: Mr. Alexander Gerasimow
Phone: (414) 382-2000

Serial No. 09/938,793
Response to Office Action mailed on January 22, 2003
Page 10

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claims 1 and 7 as follows:

1. (Amended) A bearing assembly, comprising:
a bearing insert;
a bearing housing adapted to house the bearing insert;
a cover removably securable to the bearing housing; and
a rotatable flinger secured to the cover, the rotatable flinger having a first opening therethrough, the first opening being adapted to receive a ~~the~~ rotatable shaft and to enable the rotatable flinger to form a compression seal against the rotatable shaft.

7. (Amended) The bearing assembly as recited in claim 1~~6~~, wherein the bearing insert comprises a plurality of roller bearings.